

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

List of Claims:

1-23. (Canceled)

24. (Currently Amended) The method of claim [[23]] 37, wherein the plurality of storage entity objects include at least one of a disk array system, storage pool, volume, host system, Fibre Channel: Port, and disk ~~Disk Array System, Storage Pool, Volume, Host System, FCPort, and Disk~~, objects.

25. (Currently Amended) The method of claim 24, wherein the ~~Disk Array System~~ ~~object is a top level~~ storage entity comprises the disk array system object, and wherein each object other than the ~~Disk Array System~~ disk array system object is associated as a component of the disk array system ~~Disk Array System~~ object or a subcomponent of one of the components of the disk array system object.

26. (Canceled)

27. (Currently Amended) The method of claim [[20]] 37, wherein the creating operation comprises creating a plurality of storage objects ~~Storage Objects~~, and wherein the ~~Storage Objects~~ storage objects have associations to each other that are consistent with corresponding storage entities' relationships modeled in a SMI/Bluefin profile.

28. (Canceled)

29. (Currently Amended) The method of claim [[20]] 37, wherein the inquiry is received from a SRM CIM Client Application.

30. (Canceled)

31. (Currently Amended) The method of claim [[20]] 37, wherein ~~receiving the inquiry includes receiving a the unique ID for a disk array Storage Pool; and the operations further comprise obtaining a Storage Object corresponding with the Storage Pool, given the unique ID for the Storage Pool, wherein the components and subcomponents for which information is obtained comprise storage pools and disks, and wherein the relationships indicate a relationship of storage pools to the disk array system and of the disks to the storage pools.~~

32-34. (Canceled)

35. (Currently Amended) The method of claim [[20]] 37, wherein the inquiry includes the unique ID of a component storage entity, and wherein the receiving, obtaining, creating, populating, and sending operations are repeated to obtain information concerning the component storage entity and subcomponents of the component storage entity.

36. (Currently Amended) The method of claim [[20]] 37, wherein the inquiry includes the unique ID of a component storage entity, and wherein the receiving, obtaining, creating, populating, and sending operations are repeated to obtain information concerning the component storage entity and the component storage entity's relationships to other components.

37. (New) A computer implemented method for responding to an inquiry, comprising the following operations:

receiving a single inquiry from a CIM client application including a unique ID of a top level storage entity, wherein the top level storage entity identified by the unique ID includes components associated as a component of the top level storage entity and a subcomponent of at least one component;

using CIM client APIs in response to the single inquiry to obtain information from a CIMOM using the unique ID of the top level storage entity to obtain information on components and subcomponents of the top level storage entity from multiple CIM objects on the top level storage entity and components and subcomponents of the top level storage entity in the CIMOM;

creating a plurality of storage objects in a computer readable storage medium including information on the top level storage entity and components and subcomponents, and parent-child

relationships among the top level storage entity and the components and subcomponents of the top level storage entity;

populating the created storage objects with information received from the CIMOM including identifying the entities in the top level storage entity and the parent child relationships of the top level storage entity, components and subcomponents, and wherein properties of each storage object map directly to properties of at least one CIM class used to represent the top level storage entity and components and subcomponents of the top level storage entity in the CIMOM; and

returning information on the storage objects to the CIM client application that sent the inquiry.

38. (New) A system in communication with a CIMOM for responding to an inquiry from a host, comprising:

a processor; and

a computer readable storage medium having code executed by the processor to perform operations, the operations comprising:

receiving a single inquiry from a CIM client application including a unique ID of a top level storage entity, wherein the top level storage entity identified by the unique ID includes components associated as a component of the top level storage entity and a subcomponent of at least one component;

using CIM client APIs in response to the single inquiry to obtain information from a CIMOM using the unique ID of the top level storage entity to obtain information on components and subcomponents of the top level storage entity from multiple CIM objects on the top level storage entity and components and subcomponents of the top level storage entity in the CIMOM;

creating a plurality of storage objects in a computer readable storage medium including information on the top level storage entity and components and subcomponents, and parent-child relationships among the top level storage entity and the components and subcomponents of the top level storage entity;

populating the created storage objects with information received from the CIMOM including identifying the entities in the top level storage entity and the parent

child relationships of the top level storage entity, components and subcomponents, and wherein properties of each storage object map directly to properties of at least one CIM class used to represent the top level storage entity and components and subcomponents of the top level storage entity in the CIMOM; and

returning information on the storage objects to the CIM client application that sent the inquiry.

39. (New) The system of claim 38, wherein the plurality of storage entity objects include at least one of a disk array system, storage pool, volume, host system, Fibre Channel; Port, and disk.

40. (New) The system of claim 39, wherein the a top level storage entity comprises the disk array system, and wherein each object other than the disk array system is associated as a component of the disk array system object or a subcomponent of one of the components of the disk array system object.

41. (New) The system of claim 38, wherein the inquiry is received from a SRM CIM Client Application.

42. (New) The system of claim 38, wherein the inquiry includes the unique ID for a disk array, wherein the components and subcomponents for which information is obtained comprise storage pools and disks, and wherein the relationships indicate a relationship of storage pools to the disk array system and of the disks to the storage pools.

43. (New) The system of claim 38, wherein the inquiry includes the unique ID of a component storage entity, and wherein the receiving, obtaining, creating, populating, and sending operations are repeated to obtain information concerning the component storage entity and the component storage entity's relationships to other components.

44. (New) A computer readable storage medium include code executed to communicate with a CIMOM to respond to an inquiry from a host and to perform operations, the operations comprising:

receiving a single inquiry from a CIM client application including a unique ID of a top level storage entity, wherein the top level storage entity identified by the unique ID includes components associated as a component of the top level storage entity and a subcomponent of at least one component;

using CIM client APIs in response to the single inquiry to obtain information from a CIMOM using the unique ID of the top level storage entity to obtain information on components and subcomponents of the top level storage entity from multiple CIM objects on the top level storage entity and components and subcomponents of the top level storage entity in the CIMOM;

creating a plurality of storage objects in a computer readable storage medium including information on the top level storage entity and components and subcomponents, and parent-child relationships among the top level storage entity and the components and subcomponents of the top level storage entity;

populating the created storage objects with information received from the CIMOM including identifying the entities in the top level storage entity and the parent child relationships of the top level storage entity, components and subcomponents, and wherein properties of each storage object map directly to properties of at least one CIM class used to represent the top level storage entity and components and subcomponents of the top level storage entity in the CIMOM; and

returning information on the storage objects to the CIM client application that sent the inquiry.

45. (New) The computer readable storage medium of claim 44, wherein the plurality of storage entity objects include at least one of a disk array system, storage pool, volume, host system, Fibre Channel; Port, and disk.

46. (New) The computer readable storage medium of claim 45, wherein the a top level storage entity comprises the disk array system, and wherein each object other than the disk

array system is associated as a component of the disk array system object or a subcomponent of one of the components of the disk array system object.

47. (New) The computer readable storage medium of claim 44, wherein the inquiry is received from a SRM CIM Client Application.

48. (New) The computer readable storage medium of claim 44, wherein the inquiry includes the unique ID for a disk array, wherein the components and subcomponents for which information is obtained comprise storage pools and disks, and wherein the relationships indicate a relationship of storage pools to the disk array system and of the disks to the storage pools.

49. (New) The computer readable storage medium of claim 44, wherein the inquiry includes the unique ID of a component storage entity, and wherein the receiving, obtaining, creating, populating, and sending operations are repeated to obtain information concerning the component storage entity and the component storage entity's relationships to other components.